> We see... that the theory of probabilities is at bottom only common sense reduced to calculation. –P. S. Laplace

Thursday, October 19: Read section 6.5.

1. In our class of 21, 11 are first-year, 12 are business majors, and 2 are neither.
   - What is the probability that a randomly-selected student is both a first-year student and a business major?
   - What is the probability that a randomly-selected first-year student is a business major?
2. You have a bag with 5 blue balls and 3 red balls in it. Pull out one, then another (without replacement), then record both colors. What is
   - P(second ball is blue|first ball is red)?
   - P(second ball is blue|first ball is blue)?
   - P(second ball is red|first ball is red)?

Exercises: 6.5: 1-4, 6, 9, 14, 23, 26, 36, 50, 53, 58.

Tuesday, October 24: Quiz today on sections 6.3, 6.4, 6.5.

Read section 6.6.

1. Find a homework problem from 6.4 or 6.5 that would have been easier using trees.
2. If you have a weighted coin that has $P(H) = .6$ and you flip it twice, what is the probability of getting two tails?
3. Explain example 2. It seems to say that if you get a positive TB test, you still have only a 2% chance of actually having TB, even though the test is very accurate.

Exercises: 6.6: 4, 12-13, 16, 20, 30, 37.